

IN THE CLAIMS

1. (Withdrawn) A composition comprising 5-methoxytryptamine or a pharmaceutically acceptable salt thereof and a carrier, excipient or additive; said 5-methoxytryptamine present in an amount effective to prevent or reduce the amount of mammalian cardiac tissue damage.
2. (Withdrawn) The composition as claimed in claim 1 in a form selected from the group consisting of a tablet, capsule, powder, lozenge, solution, syrup, aqueous or oily suspension, elixir, implant, and aqueous or non-aqueous injection.
3. (Withdrawn) The composition as claimed in claim 1 wherein the amount of 5-methoxy tryptamine or the salt thereof is from 5 to 500 mg.
4. (Withdrawn) A composition comprising 5-methoxytryptamine or a pharmaceutically acceptable salt thereof and a carrier, excipient or additive; said 5-methoxytryptamine present in an amount effective to treat mammalian cardiac tissue damage.
5. (Withdrawn) The composition as claimed in claim 4 in a form selected from the group consisting of a tablet, capsule, powder, lozenge, solution, syrup, aqueous or oily suspension, elixir, implant, and aqueous or non-aqueous injection.
6. (Withdrawn) The composition as claimed in claim 4 wherein the amount of 5-methoxy tryptamine or the salt thereof is from 5 to 500 mg.
7. (Withdrawn) A composition comprising 5-methoxytryptamine or a pharmaceutically acceptable salt thereof and a carrier, excipient or additive.
8. (Withdrawn) The composition as claimed in claim 7 in a form selected from the group consisting of a tablet, capsule, powder, lozenge, solution, syrup, aqueous

or oily suspension, elixir, implant, and aqueous or non-aqueous injection.

9. (Withdrawn) The composition as claimed in claim 7 wherein the amount of 5-Methoxy tryptamine or the salt thereof is from 5 to 500 mg.
10. (Withdrawn) A method for protecting cardiac tissue from damage caused by exposure to an oxygen reactive species, said method comprising administering to a patient in need thereof an amount of 5-Methoxytryptamine or a pharmaceutically acceptable salt thereof effective to protect the cardiac tissue from damage.
11. (Withdrawn) The method of claim 10, wherein the tissue is myocardium.
12. (Withdrawn) The method of claim 10 wherein the amount of 5-methoxytryptamine or the salt thereof administered to the patient is from 0.7 to 7.0 mg/kg of body weight.
13. (Withdrawn) A method for treating cardiac tissue damage caused by exposure to an oxygen reactive species, said method comprising administering to a patient in need thereof an amount of 5-Methoxytryptamine or a pharmaceutically acceptable salt thereof effective to treat the cardiac tissue damage.
14. (Withdrawn) The method of claim 13, wherein the tissue is myocardium.
15. (Withdrawn) The method of claim 13 wherein the amount of 5-methoxytryptamine or the salt thereof administered to the patient is from 0.7 to 7.0 mg/kg of body weight.
16. (Previously presented) A method for treating cardiac toxicity, myocardial ischemia, myocardial infarction or heart failure wherein the cardiac toxicity, myocardial ischemia, myocardial infarction or heart failure is induced by an

anthracycline antineoplastic comprising administering an effective amount of 5-Methoxy tryptamine or a pharmaceutically acceptable salt thereof to a patient in need thereof.

17. (Cancel)

18. (Previously presented) The method of claim 16 wherein the amount of 5-methoxytryptamine or the salt thereof administered to the patient is from 0.7 to 7.0 mg/kg of body weight.

19. (Withdrawn) A method for increasing the activity of superoxide dismutase enzyme in cardiac tissue of a patient comprising administering to the patient an amount of 5-Methoxy tryptamine or a pharmaceutically acceptable salt thereof effective to increase the activity of superoxide dismutase enzyme in the cardiac tissue.

20. (Withdrawn) The method of claim 19, wherein the tissue is myocardium.

21. (Cancel).

22. (Withdrawn) A method for inhibiting lipid peroxidation in cardiac tissue of a patient comprising administering to the patient an amount of 5-Methoxytryptamine or a salt thereof effective to inhibit the lipid peroxidation in the cardiac tissue.

23. (Withdrawn) The method of claim 22, wherein the tissue is myocardium.

24. (Cancel)

25. (Withdrawn) A method for reducing levels of creatine kinase-MB in cardiac tissue of a patient comprising administering to the patient an amount of 5-

Methoxytryptamine or a salt thereof effective to reduce the level of creatine kinase-MB in the cardiac tissue.

26. (Withdrawn) The method of claim 25, wherein the tissue is myocardium.
27. (Withdrawn) A method for reducing levels of lactate dehydrogenase in cardiac tissue of a patient comprising administering to the patient an amount of 5-Methoxy tryptamine or a salt thereof effective to reduce the level of lactate dehydrogenase in the tissue.

Claims 28-31 (Cancelled)

32. (Withdrawn) The method according to claim 27 wherein the tissue is myocardium.
33. (Withdrawn) The method according to claim 10 wherein the 5-methoxytryptamine or the pharmaceutically acceptable salt thereof is administered in a composition comprising 5-methoxytryptamine or the pharmaceutically acceptable salt and a carrier, excipient or additive.
34. (Withdrawn) The method according to claim 33 wherein the composition is in a form selected from the group consisting of a tablet, capsule, powder, lozenge, solution, syrup, aqueous or oily suspension, elixir, implant, and aqueous or non-aqueous injection.
35. (Withdrawn) The method according to claim 33 wherein the amount of 5-methoxy tryptamine or the salt in the composition is from 5 to 500 mg.
36. (Withdrawn) The method according to claim 13 wherein the 5-methoxytryptamine or the pharmaceutically acceptable salt is administered in a

composition comprising 5-methoxytryptamine or the pharmaceutically acceptable salt and a carrier, excipient or additive.

37. (Withdrawn) The method according to claim 36 wherein the composition is in a form selected from the group consisting of a tablet, capsule, powder, lozenge, solution, syrup, aqueous or oily suspension, elixir, implant, and aqueous or non-aqueous injection.
38. (Withdrawn) The method according to claim 36 wherein the amount of 5-methoxytryptamine or the salt in the composition is from 5 to 500 mg.
39. (Previously presented) The method according to claim 16 wherein the 5-methoxytryptamine or its pharmaceutically acceptable salt is administered in a composition comprising 5-methoxytryptamine or the pharmaceutically acceptable salt and a carrier, excipient or additive.
40. (Previously presented) The method according to claim 39 wherein the composition is in a form selected from the group consisting of a tablet, capsule, powder, lozenge, solution, syrup, aqueous or oily suspension, elixir, implant, and aqueous or non-aqueous injection.
41. (Previously presented) The method according to claim 39 wherein the amount of 5-methoxytryptamine or the salt in the composition is from 5 to 500 mg.
42. (Previously presented) The method according to claim 16 wherein the cardiac toxicity, myocardial ischemia, myocardial infarction or heart failure is treated by reducing levels of creatine kinase-MB in the cardiac tissue of the patient by administering to the patient an amount of 5-Methoxytryptamine or the salt thereof effective to reduce the level of creatine kinase-MB.
43. (Cancel)